

108

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Title:Broadband terahertz absorber realized by selfassembled multilayer glass spheres

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Abstract:A broadband terahertz (THz) absorber consisting of multilayer glass spheres and polydimethylsiloxane (PDMS) was realized. The multilayer glass spheres were deposited by repeating a self-assembly method used to form monolayer glass spheres and by the spin-coating of PDMS to fill the gaps between the glass spheres. The average reflection at the surface of the absorber was 0.8% and the absorbance was higher than 98% in the frequency range between 0.7 to 2.0 THz. © 2012 Optical Society of America.

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Main heading:Spin glass

Controlled terms:Glass - Microchannels - Monolayers - Multilayers - Silicones - Spheres

Uncontrolled terms:Absorbances - Broadband terahertz - Frequency ranges - Glass spheres - Polydimethylsiloxane PDMS - Self assembled multilayers - Self-assembly method

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